

ABSTRACT

**"Method for manufacturing a synthetic composite trim part for the interior of an automotive vehicle."**

For manufacturing the composite automotive trim part a flowable skin material is applied onto a first mould surface (4), a flowable substrate material is applied onto a second mould surface (7), the mould (5, 8) is closed and a foamable material (3) is applied in the gap between the flexible skin layer (1) and the rigid substrate layer (2). Both the flexible skin layer and the rigid substrate layer can be manufactured by spraying a polyurethane reaction mixture. Advantages are that no positioning of the rigid substrate layer nor of the flexible skin layer is required and that especially the rigid substrate layer doesn't have to be manufactured separately, so that the production costs are reduced and the quality of the trim part is increased. The sealing of the mould cavity for producing the foam layer is achieved by providing a sufficiently thick layer of flexible skin material in the zone of contact with the substrate layer. Installation and tool costs can be reduced by separating both mould halves and producing the skin layer and the substrate layer along different production lines.

Figure 1C.